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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/853,276	05/11/2001	Randall D. Blanchard	LITD:0013	5871

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EXAMINER	
RUDE, TIMOTHY L	

ART UNIT	PAPER NUMBER
2871	

DATE MAILED: 02/28/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/853,276	BLANCHARD, RANDALL D.	
	Examiner	Art Unit	
	Timothy L Rude	2871	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *19 November 2003*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-15* is/are pending in the application.

4a) Of the above claim(s) *4,8 and 9* is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-3,5-7 and 10-15* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Claims

Claims 1, 2, 12, and 15 are amended.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 1-3, 5, 6, 11-13 and 15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Abileah et al (Abileah) USPAT 5,629,784 in view of Silverstein et al (Silverstein) USPAT 5,442,467.

As to claims 1-3, 5, 6, 12-13 and 15, Abileah discloses in Figure 1 (a), a display comprising: a transmissive LCD display screen, 3-15,;
a transparent glass panel, 35, (col. 8, lines 10-15) having a backside and an anti-reflective (Applicant's anti-glare) front surface (col. 14, lines 15-32) configured to diffuse ambient light, which results in reduced glare (multiple examples taught); and
a diffuser, 21 (Applicant's bulk diffuser), (col. 11, lines 54-62) disposed between the transmissive display screen and the backside, and the bulk diffuser is configured to diffuse image light originating from a backlight, 2, of the display.

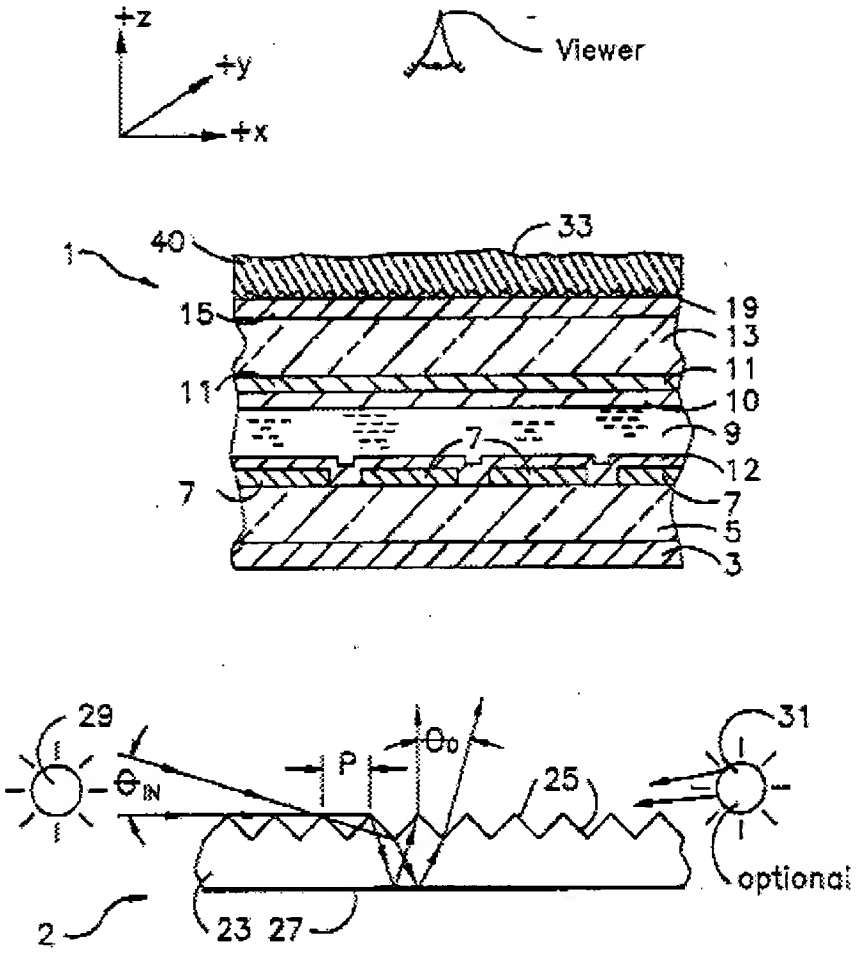

Fig. 1(b)

Abileah does not explicitly disclose a bulk diffuser bonded to the transmissive display screen and the transparent panel.

Silverstien teaches the use of index of refraction matched (Applicant's index-matched) adhesives to completely bond (Applicant's bubble-free) diffusers to neighboring structures to reduce unwanted reflections and improve display contrast and color performance (col. 9, line 51 through col. 10, line 22).

Silverstein is evidence that ordinary workers in the art of liquid crystals would find the reason, suggestion, or motivation to add index of refraction matched adhesives to

bond diffusers to both neighboring structures to reduce unwanted reflections and improve display contrast and color performance.

Therefore, it would have been obvious to one having ordinary skill in the art of liquid crystals at the time the invention was made to modify the LCD of Abileah with the index of refraction matched adhesives to bond diffusers to both neighboring structures of Silverstein to reduce unwanted reflections and improve display contrast and color performance.

As to claim 10, Abileah in view of Silverstein disclose the structure as claimed which would result in a bulk diffuser configured to reduce undesirable optical effects caused by the surface texture per Applicant's enabling disclosure. This is not improper hindsight. Applied prior art teaches all that Applicant has disclosed in the instant Specification regarding this limitation.

As to claim 11, Abileah discloses a system wherein the bulk diffuser comprises a holographic diffusive material configured to diffuse light within the diffusive material (col. 11, lines 60-63).

Claim 7 is rejected under 35 U.S.C. 103(a) as being unpatentable over Abileah in view of Silverstein in view of Varaprasad et al (Varaprasad) USPAT 6,087,012.

As to claim 7, Abileah in view of Silverstein disclose the system of claim 6.

Abileah in view of Sanelle does not explicitly disclose a chemically etched surface.

Varaprasad discloses in the Background of the Invention that chemical etching of the outer surface of a glass substrate is one way of forming an anti-glare surface known in the prior art (col. 1, lines 28-52).

Varaprasad is evidence that ordinary workers in the art of liquid crystals would find the reason, suggestion, or motivation to use a chemically etched glass transparent panel as having art recognized suitability for the intended purpose of achieving desired anti-glare performance (MPEP 2144.07).

Therefore, it would have been obvious to one having ordinary skill in the art of liquid crystals at the time the invention was made to modify the LCD of Abileah in view of Silverstein with the chemically etched glass transparent panel of the prior art cited by Varaprasad to achieve desired anti-glare performance.

Claims 1-3, 5, 6, 11-14 and 15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Abileah et al (Abileah) USPAT 5,629,784 in view of Sanelle et al (Sanelle) USPAT 5,442,467.

As to claims 1-3, 5, 6, 12-14 and 15, Abileah discloses in Figure 1 (a), a display comprising: a transmissive LCD display screen, 3-15,;

a transparent glass panel, 35, (col. 8, lines 10-15) having a backside and an anti-reflective (Applicant's anti-glare) front surface (col. 14, lines 15-32) configured to diffuse ambient light, which results in reduced glare (multiple examples taught); and
a diffuser, 21 (Applicant's bulk diffuser), (col. 11, lines 54-62) disposed between the transmissive display screen and the backside, and the bulk diffuser is configured to diffuse image light originating from a backlight, 2, of the display.

Abileah does not explicitly disclose a bulk diffuser bonded to the transmissive display screen and the transparent panel.

Sanelle teaches the use of an index-matched bond material (col 5, line 56 through col. 6, line 2) wherein the index-matched bond material has no air gaps (Applicant's substantially bubble-free) (col. 6, lines 1-2), and wherein the index-matched bond material comprises an epoxy (col. 5, lines 66 and 67) to eliminate unwanted refractions and thereby improve display performance.

Sanelle is evidence that ordinary workers in the art of liquid crystals would find the reason, suggestion, or motivation to add an index-matched bond material on both sides of the bulk diffuser wherein the index-matched bond material is bubble-free, and wherein the index-matched bond material comprises an epoxy, to eliminate unwanted refractions and thereby improve display performance.

Therefore, it would have been obvious to one having ordinary skill in the art of liquid crystals at the time the invention was made to modify the LCD of Abileah with the index-matched bond material on both sides of the bulk diffuser wherein the index-matched bond material is bubble-free, and wherein the index-matched bond material

comprises an epoxy of Sanelle, to eliminate unwanted refractions and thereby improve display performance.

As to claim 10, Abileah in view of Sanelle disclose the structure as claimed which would result in a bulk diffuser configured to reduce undesirable optical effects caused by the surface texture per Applicant's enabling disclosure. This is not improper hindsight. Applied prior art teaches all that Applicant has disclosed in the instant Specification regarding this limitation.

As to claim 11, Abileah discloses a system wherein the bulk diffuser comprises a holographic diffusive material configured to diffuse light within the diffusive material (col. 11, lines 60-63).

Claim 7 is rejected under 35 U.S.C. 103(a) as being unpatentable over Abileah in view of Sanelle in view of Varaprasad et al (Varaprasad) USPAT 6,087,012.

As to claim 7, Abileah in view of Sanelle disclose the system of claim 6.

Abileah in view of Sanelle does not explicitly disclose a chemically etched surface.

Varaprasad discloses in the Background of the Invention that chemical etching of the outer surface of a glass substrate is one way of forming an anti-glare surface known in the prior art (col. 1, lines 28-52).

Varaprasad is evidence that ordinary workers in the art of liquid crystals would find the reason, suggestion, or motivation to use a chemically etched glass transparent panel as having art recognized suitability for the intended purpose of achieving desired anti-glare performance (MPEP 2144.07).

Therefore, it would have been obvious to one having ordinary skill in the art of liquid crystals at the time the invention was made to modify the LCD of Abileah in view of Sanelle with the chemically etched glass transparent panel of the prior art cited by Varaprasad to achieve desired anti-glare performance.

Response to Arguments

Applicant's arguments with respect to claims 1-3, 5, 6, 11-14 and 15 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Timothy L Rude whose telephone number is (571) 272-2301. The examiner can normally be reached on Monday through Thursday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Robert H Kim can be reached on (571) 272-2293. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 872-9306 for regular communications and (703) 872-9306 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (571) 272-1550.

Timothy L Rude
Examiner
Art Unit 2871

TLR
February 18, 2004